

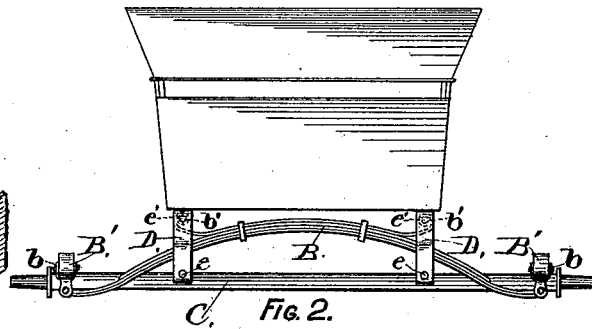
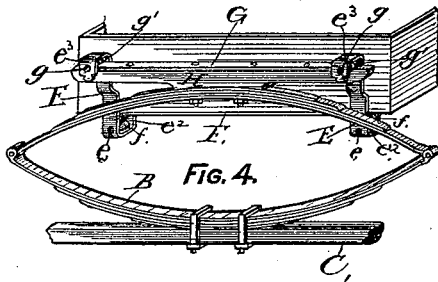
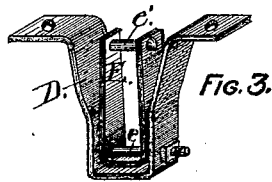
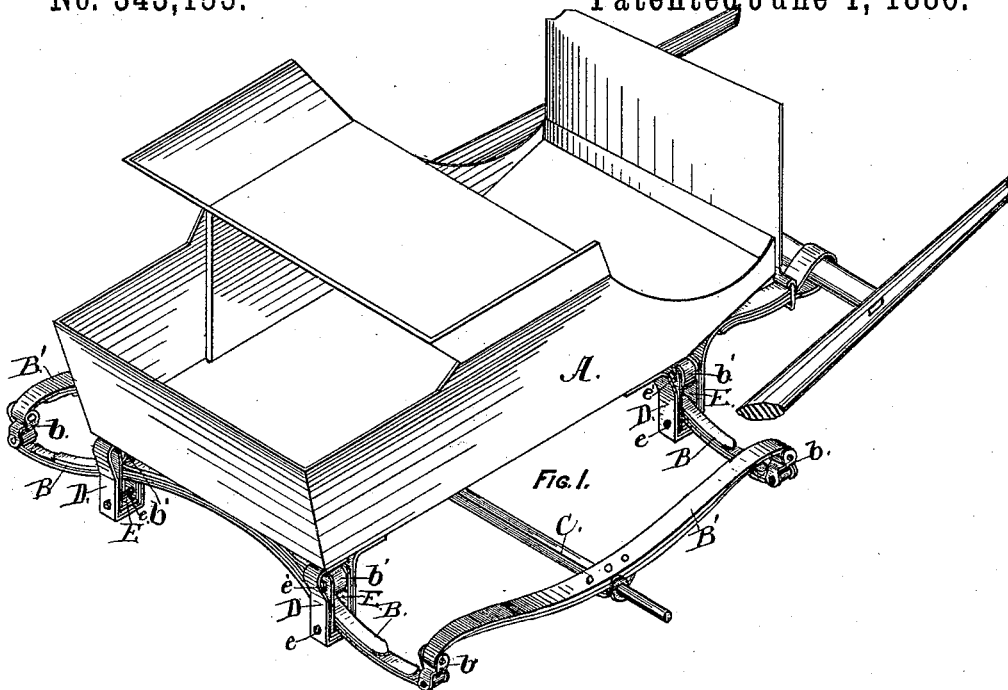
(No Model.)

W. L. PURPLE.

VEHICLE SPRING.

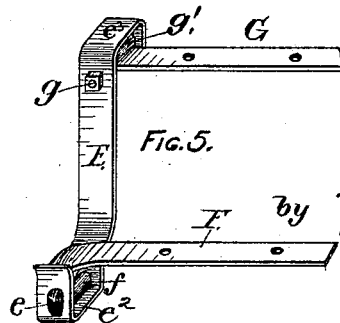
No. 343,153.

Patented June 1, 1886.



Witnesses:

S. B. Brewer.  
Fred. G. Michel



Inventor:

W. L. PURPLE.

by William H. Loomis,

Attorney.

# UNITED STATES PATENT OFFICE.

WILLIAM L. PURPLE, OF ALBANY, NEW YORK.

## VEHICLE-SPRING.

SPECIFICATION forming part of Letters Patent No. 343,153, dated June 1, 1886.

Application filed February 9, 1886. Serial No. 191,387. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM L. PURPLE, of the city and county of Albany, in the State of New York, have invented new and useful  
5 Improvements in the Mode of Attaching Vehicle-Bodies to their Springs, of which the following is a specification.

My invention relates to an improved mode of attaching the bodies of vehicles to their  
10 springs; and the object of my invention is to afford means for permitting the running-gear to receive a lateral jar when passing over ruts, rough pavements, &c., without imparting a lateral motion to the body of the vehicle.  
15 This object I attain by means of the construction illustrated in the accompanying drawings, which, being herein referred to, form part of this specification, and in which—

Figure 1 is a perspective view of the body and springs of a road-cart provided with my improvement; Fig. 2, a rear elevation of the same; Fig. 3, a detached and enlarged perspective view of one of my hangers and swinging shackles for connecting the body with the  
20 springs; Fig. 4, a perspective view of part of a buggy, showing a modification of my invention as applied to elliptic springs; and Fig. 5, an enlarged perspective view of the swinging shackle shown in Fig. 4.

As represented in the drawings, A is the body of the vehicle, which may be of any required size and shape.

The springs shown in Figs. 1 and 2 consist of two transverse springs, B, and two side  
35 springs, B', the latter being secured to the axle C, and the four being jointed together by shackles b to form what is known to the trade as a "platform-spring." The upper leaf of each transverse spring B has its opposite ends  
40 coiled to form eyes b' for receiving shackles, as hereinafter set forth. Hangers D are secured at opposite sides to the underside of the body A, so that the transverse springs B will pass freely through them. Each of said hangers  
45 is provided with a swinging shackle, E, that is made in the form of an open loop, and is pivoted to the hanger by a transverse pin, e, in such manner that said shackle will swing freely in the hanger. The upper end of the  
50 shackles E is pivoted to its appropriate eye b'

by means of the shackle-pin e'. When the body A is attached to the springs B in the manner above described, and contains any weight, the running-gear may receive any lateral jolt without imparting a sudden or jolting motion to the body, and by this means  
55 when a top is used upon the vehicle the usual and annoying switching of the top is avoided.

In the modification shown in Fig. 4 the strap F is secured on the under side of each  
60 end of the body A of a buggy or other vehicle. Said strap is provided with an eye, f, for receiving the lower pivot-pin, e, of a swinging shackle.

The shackle E is made with a single vertical bar having a lower hook-shaped off-set, e<sup>2</sup>, which is pivoted to one of the eyes f, and an upper hook-shaped off-set, e<sup>3</sup>, which is pivoted by the pivot-pin g to one of the eyes g', which are formed at each end of a strap, G,  
70 that is fixed to a bearing-bar, H, which is secured to the upper side of each transverse spring B, as shown in Fig. 4. When preferred, the bearing-bar H may be dispensed with. In such cases the upper leaf of the springs will  
75 be provided with eyes, as hereinbefore described, and the upper end of the swinging shackles will then be connected directly to said springs.

The pendulous motion of the swinging  
80 shackle shown in the modification will permit the running-gear of the vehicle to receive a lateral jolt without imparting a like motion to the body of the vehicle.

I claim as my invention—

1. The combination, with the vehicle-body  
85 A, provided with hangers D, having swinging shackles E pivoted thereto, of the transverse springs B, pivotally connected to said swinging shackles, all being constructed and  
90 arranged to operate as herein specified.

2. The combination of the body of a vehicle having swinging shackles pivoted thereto and transverse springs provided with eyes to which the said swinging shackles are pivoted, substantially as and for the purpose specified.

WILLIAM L. PURPLE.

Witnesses:

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